# Chapter 16 Connecting Places, Connecting to Place: Migrants' Use of ICTs for Exploring Lisbon



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#### 16.1 Introduction

"I guess seventy percent of the places I go here in Lisbon I found through Facebook," said Karen. She started by 'liking' the Facebook pages of the places she already knew in the city, and then the social network began recommending her new venues, concerts, and workshops. "I even discovered a cultural association right next to where I live because of Facebook, as a friend of mine confirmed her presence online at an event that would take place there and I saw it on my newsfeed". The passage above is a story about the power of algorithms, and about the fluid frontiers between the digital and the material spatial experience. It is also a story about migrant emplacement, as Karen is a migrant living in Lisbon since 2015, and her use of Facebook and other social media has directly shaped her knowledge about Lisbon's urban resources.

The use of information and communication technologies (ICTs) is not a new topic in migration and integration studies. Since the early 1990s, transnationalism literature has explored the ways migrants utilise digital resources to stay connected with distant family members and friends, to provide support to other migrants, or send money abroad (Glick Schiller et al., 1992; Portes et al., 1999; Vertovec, 1999). More recently, researchers have also looked at migrants' mobilisation of digital tools to carry out the actual physical migration journey, whether to plan migration prior to departure or to obtain information *en route* (Frouws et al., 2016). Yet, very little attention has been paid to understanding the role ICTs play in the process of settlement. While there have been studies about technologies and digital tools facilitating migrants' arrival, including apps designed to help newcomers navigate local bureaucracy and speed up paperwork (Benton, 2014), scholarship has largely

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ignored how migrants' digital connections may impact longer-term processes of integration.

The need for a deeper glance at the relationship between ICTs and migrant emplacement also stems from the fact that our urban experience has become increasingly mediated by digital technologies, whether we have experienced migration or not. As Gordon and Silva (2011) stated, cities have become *networked localities*. The places we visit on a daily basis, they argue, are now filled with infinite virtual data (e.g. reviews, pictures, thoughts, etc.), which are geo-referenced, accessible, and constantly being updated by users. Moreover, as digital algorithms become ever-more sophisticated, technology has taken an active role in channelling our attention to specific urban resources (such as restaurants, shops, cinemas, etc.), or to specific activities (events, concerts, meetings, etc.), based on the data we generate as Internet users and on the segmentation of digital marketing.

Yet, we should be careful not to essentialise the ways migrants use ICTs. As digitally-connected urban inhabitants, there is nothing different about the ways migrants access Facebook, post pictures on Instagram, or join WhatsApp group conversations (Dahinden, 2016). Instead, our analytical efforts should rather focus on the extent to which ICTs may perform a key role in processes that are of particular significance to migrants (and other kinds of newcomers), such as learning to navigate and use an unfamiliar urban context. To be aware of the city's resources and of how to use them has a fundamental role in terms of migrant integration (Buhr & McGarrigle, 2017). Furthermore, ICTs may function as fundamental tools for migrant place-making, as Facebook pages, blogs and other news clips can work to reinstall marginalised migrant groups into local narratives (Desille, 2019) or, on the contrary, consolidate dominant discourses over excluded/displaced populations (Desille & Sa'di-Ibraheem, 2021).

This chapter discusses the use of ICTs by migrants living in Lisbon, Portugal. It focuses on the ways newcomers have relied on digital tools to connect to the city's resources, as well as to share information online about their personal experiences. We have looked at ICTs as an increasingly important interface mediating migrants' relationships with urban space, whether it works as a simple wayfinding tool, or as a crowd-sourced information pool supporting migrants' everyday practical decisions. Empirical data was generated as part of a pilot study including 8 migrant individuals. Research participants were interviewed but also joined a purposefully-created WhatsApp group, an innovative qualitative method allowing participants to contribute to the research objectives on their own time, as well as to interact with each other. Participants were able to circulate pictures and posts from social media, screenshots of their apps, links to websites they thought were particularly relevant to their everyday urban life, and other urban/digital resources.

In its first section, the chapter situates the role ICTs play in wider discussions about urban experience and migrant integration. We argue that, although urban embodied navigation cannot be reduced to its digital component, ICTs are fundamental tools mobilised by migrants in order to go about their everyday urban lives.

In the subsequent section, we turn our attention to Lisbon and to our empirical data analysis. The section discusses Lisbon's contemporary urban change and migration patterns, introduces our research design and methodology, and, finally, thematically explores our main findings. We end the chapter by summarizing its potential contributions to the field of migration and integration studies, and by proposing pathways for future research.

## 16.2 Learning to Use the City: ICTs and Embodied Navigation

Looking back at Diminescu's (2008) epistemological manifesto claiming a 'connected migrant paradigm' helps elucidate how information and communication technologies have impacted migration since then. Today, some of the most disseminated images about migration, including Stanmayer's World Press Photo of the Year in 2013, portray asylum seekers carrying almost nothing but their smartphones. 'Migrating the WhatsApp way' (Frouws et al., 2016) has come to represent contemporary forms of border crossings for which the use of social media platforms and geolocation apps became a defining feature.

Three decades of transnationalism studies and its ramifications have paved the way for a renewed understanding of migrants' connectedness. In addition to the use of ICTs by people on the move, we have learned how digital social media and virtual communication tools have proved crucial for sustaining long-distance family and kinship ties (Baldassar, 2016; Baldassar et al., 2016; Dekker & Engbersen, 2014; Nedelcu & Wyss, 2016), managing remittances (Elmi & Ngwenyama, 2020), enhancing migrants' political action and mobilisation across borders (Kissau, 2012), or building a sense of self and class identity (Sun & Qiu, 2016). Likewise, the mainstreaming of ICTs has even reformed our very notions of family and its related administration of care (Kofman et al., 2022), just like gender roles have been reproduced or challenged through new transnational media channels (Miller & Madianou, 2012; Cuban, 2018).

While a transnationalism perspective has demonstrated that ICTs are effective instruments helping to sustain families, communities, and diasporas across borders, less attention has been given to the role these technologies play in the ways migrants manage life locally (Lingel, 2015 and Kim & Lingel, 2016 are notable exceptions). This may be partially explained by an enduring (mis)understanding of the local level as self-contained and self-constituting places. Along with Smith (2001), Massey (2005), and Conradson and Latham (2005), we believe that looking at the local level does not imply a simplification of the empirical realities studied. On the contrary, these and other scholars have claimed a complex understanding of the 'local', which is crisscrossed by transnational processes and practices. As Buhr (2018a, 216) summarised, 'we can argue that being local has less and less to do with being

provincial, as the local level and the local experience are increasingly permeated by translocal connections and [digital] channels through which even practical urban knowledge is transmitted and shared'.

Following Glick Schiller and Çağlar's (2016) call for a global and relational perspective on the structural shaping of localities, migration scholars have turned to the local level as entry points for discussing the ways migrant newcomers 'fall into' pre-existing local urban dynamics, or else take part in new ones. In this sense, migrants' emplacement becomes a process through which individuals build or rebuild networks of connection within the constraints and opportunities of a specific city (Glick Schiller & Çağlar, 2013). This chapter's concern with the ways migrants learn to use a new city and become aware of its resources stems from an understanding that migrants are full urban inhabitants – affected by cross-cutting global and local processes of inequality, yes, but still city dwellers who are ultimately enmeshed in the work of carrying a life locally.

A rich body of scholarship has taken up the task of exploring the various dimensions of migrants' interactions with the urban local level. The idea that migrants become grounded in the local through their everyday practices (van Riemsdijk, 2014), whether by creating affective ties toward a new city (Kochan, 2020), establishing networks of support (Wessendorf, 2018), or by learning to navigate and use local urban resources (Buhr, 2018b) has shed light on the manifold meanings, qualities, rhythms, and affordances of local life. Nevertheless, these studies have mostly relied on an offline approach to migrants' urban experience and rarely engaged with the potentialities of ICTs in shaping migrants' relationships with the local.

Learning to use a (new) city is both an online and an offline endeavour. A lot has been argued about how embodied navigation, that is, the actual practice of going around (or wayfaring) is at the basis of how we produce urban knowledge and practical skills (Ingold, 2011). The art of dwelling in cities (Certeau & Rendall, 1984) has increasingly come to encompass navigating through digital resources, whether for wayfinding (e.g. Google Maps, Waze, CityMapper, etc.), for sharing urban information (WhatsApp, Telegram, but also TripAdvisor, and other reviewbased websites), for finding a place to live (real estate agencies' websites), or simply to find out 'what's on' (online festival agendas, cinema, and leisure activities in general). The frontiers between embodied and virtual navigation, or between online and offline urban experience are blurred.

As digital technologies become so ingrained in everyday urban experience, they also raise the question of autonomy. While using our smartphones to check the working hours of a café or the timetable of a bus line facilitates our use of urban spaces, some of our research participants, as we will see in the following section, shared a sense of gratification by *not* relying on ICTs to find their way through Lisbon. In a context of growing technology dependence, the capacity to mobilise urban resources autonomously and without recourse to apps or smartphones is often felt as a testament to the level of familiarity one entertains with one's local surroundings.

#### 16.3 Emplacement and Connectivity in Lisbon

#### 16.3.1 Migration in Lisbon

During the last ten years, the stock of documented foreign residents in Lisbon more than doubled, changing from 44,784 in 2010 to 107,238 in 2020, and increasing its proportion in the total population from 8.2% to 19.6%. The increase in the number of foreign citizens in the Portuguese capital was followed by the diversification of their geographic and social-cultural origins. In 2020, according to the registries of the Foreigners and Borders Office (*Serviço de Estrangeiros e Fronteiras – SEF*), documented migrants of 171 nationalities were living in the city.

While Brazil has traditionally been (and still is) the most representative single-origin country of documented migrants in Lisbon, its relative weight in the total foreign population reduced from 29.8% in 2010 to 17.6% in 2020. In this period, the city has seen its postcolonial migration patterns decrease in proportion, while intra-European migration became more and more important. In 2010, migrants from Brazil and from the Portuguese-speaking African countries accounted for half (49.7%) of the stock of documented foreign residents in Lisbon. This number decreased to 24.7% in 2020. In contrast, migrants from EU countries and from the UK, taken together, amounted to 20.7% of the city's total foreign residents in 2010, and 37.4% in 2020, becoming the most expressive foreign group in the city. Among intra-European migrants, the main nationalities are French, Italian, Spanish, and German.

The increase in the foreign resident population observed in Lisbon from 2015 onwards, and the changes already mentioned in terms of main origin countries were paralleled by a growing proportion of international students, researchers, highly skilled workers, independent workers, investors, and retirees (Fonseca et al., 2016; Oliveira, 2021). The recent expansion in the number of highly skilled and lifestyle migrants is largely due to the perception of Portugal as a safe country, friendly to (privileged) immigrants, and to the tax advantages from which they may benefit (Montezuma & McGarrigle, 2019; McGarrigle, 2021). In this context, Lisbon became a new hotspot not only for lifestyle migrants (who have traditionally headed to the South of Portugal) but also for digital nomads and other transnational remote workers, whose presence has notably increased since the COVID-19 pandemic.

### 16.3.2 Methodology

This project produced empirical data based on a qualitative mixed-methods approach. First, our pilot study comprised semi-structured in-depth interviews with eight migrants who moved to Lisbon from 2014 to 2019. This time period was set for two reasons: one is that participants all had the chance to experience life in the city before and during the pandemic-related mobility restrictions. The other links with

the recent level of urban transformation Lisbon has experienced in this period — which includes the proliferation of digital tools facilitating visitors' and newcomers' experience of the city. Moreover, as the project sought to capture the manifold ways migrants employ ICTs to establish a connection to Lisbon's urban resources, the recruitment process was designed to account for the many spatial roles people play out every day (as neighbourhood residents, shoppers, parents, and commuters, etc.). In this sense, research participants were recruited following a purposive sampling rationale ensuring gender balance (four women and four men), professional diversity (presential and remote workers), and household composition (single, in cohabitation, with/without children). In addition, we strove to gather a sample of participants that resembled the current migration patterns to Lisbon in terms of origins. Table 16.1 summarises the research participants' details (see Annex below).

All eight participants were approached through the researchers' both physical and virtual networks of contacts. Given the exploratory nature of the project, we decided to approach only middle-class migrants. On the one hand, it is safe to assume that middle-class individuals possess a minimum standard of digital literacy and familiarity with apps, social networks, and other digital tools. On the other hand, middling migrants are often studied in rather segmented ways (highly skilled, lifestyle, academic/student migration, etc.), which makes them an underexplored category as such within migration and integration studies (Conradson & Latham, 2005). Interviews aimed at obtaining information about participants' migration trajectories, residential history, urban habits, and professional activity. Then, participants were asked about their historical use of ICTs (social media, time spent on phones, apps, etc.) and about the extent to which the digital has channelled their knowledge and use of Lisbon's urban resources. The interviews lasted approximately one hour each, and were then transcribed and coded.

The second phase of fieldwork consisted of a closed WhatsApp group discussion created by the researchers and involving all eight participants. In our WhatsApp research group, participants received questions and tasks on a daily basis. They were able to share pictures and posts from social media, screenshots of their apps, links to websites they thought were particularly relevant to their everyday life, and other urban/digital resources. While Datta argued for her own project on women's perceptions of safety/fear in Indian marginal city spaces (2020, 1324) that this research method resulted in 'a rich multimedia sharing of experiences of moving around the city', in our study it also functioned as a platform for more extended contact with participants (and among participants themselves), in which we could introduce tasks and follow-up questions. Our WhatsApp research group lasted 4 weeks, and all entries were exported and coded. Different from face-to-face focus groups, this technique grants participants the flexibility to reply to questions whenever they deem convenient. This allowed participants to take the time to share very detailed

<sup>&</sup>lt;sup>1</sup>Given his level of literacy – he speaks Urdu, English, Portuguese and German -, his status of shop owner, and his belonging to middle-class Pakistan, we have considered Mohamed a middling migrant, even though he does not hold a higher education degree as the rest of the participants.

accounts of their experiences in Lisbon. However, not all participants had the same degree of engagement. Thomas, who got COVID-19 during the WhatsApp group duration, and Mohamed, who travelled back to Pakistan for a family visit, had a lower level of contribution to the group's discussion. All fieldwork took place in the first semester of 2022.

#### 16.3.3 Findings

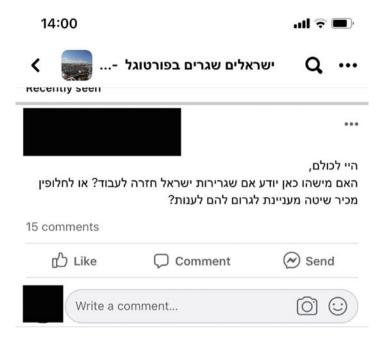
#### 'The Almighty WhatsApp'

WhatsApp was the first and most used application among all research participants. They use the app on their smartphones, and a few also have it open as a tab on their personal computers. All of them spend a great amount of time on WhatsApp to interact with family and friends in Lisbon and in other cities in the world. As Armando justifies: "since I am a foreigner [...] most of the people I interact with are not here, but there. So the only way to interact is through the Internet". We verify here the importance of ICT-based co-presence or mediated co-presence (Baldassar, 2016; Baldassar et al., 2016; Cuban, 2018; Dekker & Engbersen, 2014; Miller & Madianou, 2012), an argument that has gained thickness in the last years in the field of migration studies.

Communication with friends and relatives is not the sole use of *WhatsApp*. Participants point out their involvement in groups beyond their own closed ones: groups composed of alumni, current peer students, Mozambican students in Portugal, work colleagues, church members, Brazilian women in Portugal, Italian parents in Lisbon, parents from the same school, and more. Here, *Facebook* comes into the picture too: its pages and groups function as online fora on a range of topics. As Iorio already argued in her study about Brazilian students in Lisbon, Facebook is crucial before and at the time of migration (Iorio & Fonseca, 2017). Participants follow specific pages or are members of groups, such as groups where migrants from common origins (e.g. Israeli, French, or South-East Asian) share tips and recommendations before migration or during the first months of settlement; groups where available rooms and flats in Lisbon are advertised; groups for swaps and donations such as Buy Nothing Lisbon; and pages of cultural, militant or leisure organisations. For instance, Flora shared:

So I wanted to know what was there in the city and it was all through the Internet. All through... Facebook itself, to see what events there were or... even the *Festival Feminista* was a call that was made on Facebook and I came across the call and went to these *Festival Feminista* meetings.

Few have attempted to escape the WhatsApp/Facebook monopoly. Rachel tried to move her contacts to Signal, and Thomas mentioned Telegram, but, in general, their use is rare. WhatsApp and Facebook are more widely used to link with other migrants or with Portuguese people than dedicated platforms, such as the social media Meet Up which enables the organisation of city-based meetings and events



**Image 16.1** Screenshot from Tal. Tal posted in the Facebook group "Israelis living in Lisbon": "Hi everyone, is there anyone here who knows if the Israeli Embassy went back to work or that has any interesting strategy to make them answer?". Fifteen answered with a comment, and he eventually managed to contact the Embassy and solve the issue

along its users' specific hobbies and interests. If Andrea and Tal have used Meet Up when arriving in Lisbon, they have eventually switched to WhatsApp or Facebook. Participants seemed to recognise a certain 'social media stratification' by linking the Meet Up platform as a preserve of European and North American relatively privileged migrants, or as Flora puts it, "Global North" migrants.

For their socio-cultural needs, participants mentioned the restaurant aggregator Zomato and the restaurant booking service The Fork. More broadly, the photo and video sharing social media Instagram – another brand of the Meta conglomerate also owning WhatsApp and Facebook – is indeed used to look for events, restaurants, places to visit, and more. Commonly, participants are redirected to certain events or places of their liking by Facebook or Instagram based on their embedded algorithmic calculations.

For this research project focused on digital urban resources, we also enquired whether participants used geolocation apps. Overwhelmingly, they used Google Maps (and sometimes City Mapper). Several pointed out that they "save" places they liked or would like to visit on Google Maps while Tal remembers that he and his partner created layers on the Google Maps' feature MyMaps registering their exploratory walks in Lisbon. All research participants also downloaded Uber

and/or Bolt apps and use them for car rides, to use the bikes or electric scooters available in Lisbon, and to order food.

When it comes to employment, LinkedIn is the professional social media used by a few. Although they mention locally-used platforms, Andrea, Thomas, and Tal have mostly relied on LinkedIn when looking for a job. They simply switched their location to Lisbon and began receiving job adverts for Lisbon-based posts.

Apps have not replaced browser-based searches. Google was mentioned when it came to scan universities and education opportunities; to check the requirement for visa and social security upon arrival; to look for housing (Couch Surfing, AirBnb, Uniplaces and Lovely Place for short-term rental before settling; and Idealista and Imovirtual when the stay extends); to sell and buy second-hand (such as the Portuguese Website OLX); and later on for events (TimeOut, TripAdvisor, and specialised website for families such as *Estrelas e Ouriços*).

Following such descriptive overview of ICTs use among the group members, there is little that differentiate migrants from other locals or short-term visitors/tourists. The technology and the type of apps and websites mobilised by research participants are based on general needs or solution-based tools that are used transversally by urban residents, regardless of origin or length of stay.

#### **Embedded Digital Urban Lives**

Participants (and researchers) spend a lot of time in front of a screen. Andrea, Thomas, Tal, Flora, and Karen work at home from their computer, Armando and Rachel are students and are therefore required to spend a good part of their day in front of a monitor, and Mohamed is constantly checking his smartphone throughout his 14 h-work shift (he does not own a computer). Yet in the interviews, they also describe at length a wealthy family, social, and/or cultural life. In that sense, an intensive digital presence was in no way related to a weak level of in-person interactions with people and with the resources of the city of Lisbon.

What's more, the interviews we recorded demonstrate that digital and urban resources are in fact mutually constitutive. Sometimes, ICTs facilitate city exploration, while at other times, participants experience the city before they look for further information online. But no matter the order – digital/urban or urban/digital -, it makes no doubt that digital resources influence our urban experiences; that our experiences will influence what content we feed online; and eventually, this will, in turn, have an impact on the ways migrant persons use certain urban resources.

Rachel wrote in our research WhatsApp group that "Google, apps, internet, etc. are helpful in finding the big picture... and then you, of course, by yourself, through trial and error, navigate the details". As we pointed out in the introduction, Karen discovered the cultural association *Sirigaita* a few hundred metres from her home thanks to a suggestion made by Facebook. Proximity does not necessarily mean familiarity – it was Facebook that made her discover the place, not the fact that she

lived nearby. She admits in the interview that 70% of the cultural events she takes part in are Facebook suggestions and this is how she, in her words, builds her "cultural agenda". On a similar note, Rachel remembers that another geolocation-based app was helpful in getting to know what the city had to offer: dating apps.

So, I met a guy, like, just met him, it was like potentially romantic at the beginning and then I was like "Yeah, I'm not interested", but we realised that we both loved football so he was like "Wow, well, if you love football then you should come play with me!" and I was like "Oh, where do you play?", so "It's with this group...", and then he took me there. [...] I got to see a lot of different places that I had never seen before, you know?

Other times, participants rely on offline knowledge, and only later verify information online. Tal remembers the bus lines by heart, but uses the app Move it to look up the schedule. Rachel first sees flyers or billboards in the street with cultural events, takes a picture of them, and looks up the details on the Internet once back home. And Andrea saves places she has discovered wandering around on her Google Maps. This corroborates Gordon and Silva's argument (2011) that "we used to talk about the World Wide Web as an interconnected information space set aside from the world we live in, but the world we live in and the web can no longer be so easily separated" (2011, p. 1).

Indeed, there is an emerging body of research in Lisbon looking at the ways the online and the offline imaginaries of the city are brought together. Baumann et al. (2017), Riboldi (2018) and Feijó and Gomez (2018) have constituted samples of Instagram images to sketch a visual imaginary of Lisbon, either by locals or tourists. As Massey et al. (1999, 107) have argued, "placemaking is a localised process which participates in the production of places. It is, precisely, a reorientation of the city within a restructured wider geography. And that restructuring of the wider geography, of the networks within which the city is set, provokes effects within the city itself". The data we collected here hints that the embeddedness of digital and urban resources affects people's experiences and the very production of the places that make up Lisbon.

As a freelance family consultant, Andrea shares information about Lisbon for new families settling in the city. Since 2017, Andrea has been the administrator of 4 Facebook groups for (mostly foreign) parents in Lisbon. The success of these groups lies in the English-speaking peer support offered to foreign residents with children, from medical services to playdates or second-hand children's clothes. Thomas is part of a Facebook group where French nationals share experiences in Lisbon. He affirms that the questions are always the same, e.g. "in which neighbourhood should I live?", "how much does one need to survive in Lisbon?", etc. Thomas's opinion is that French newcomers, therefore, tend to settle in neighbourhoods recommended to them by other fellow French. Would they choose these areas if it was not for tips collected online? He says the comments following the posts are often complaints about the pressure put on rents by French newcomers. The anger of certain members is related to processes of gentrification that foreign newcomers – particularly from European countries with a higher purchasing power –

take part of (Buhr & Cocola-Gant, forthcoming). Thomas humorously refers to the process of gentrification many neighbourhoods of Lisbon are affected by, and says: "Lisbon became a city much more... I don't know, with brunch and all this". Yet, he admits he himself takes advantage of the new commercial offer by frequenting bars and restaurants catering to international customers.

Against running the risk of techno-optimism (Leurs & Smets, 2018), participants also shared a sense of resistance to ICTs. Rachel expressed a lot of concern regarding privacy in the interview, as well as Tal who said: "It doesn't interest me to expose or tell the world what I am doing or where I am going...". All participants have given value to an offline exploration of the city. Armando finds it better to ask people for directions or to call restaurants rather than check comments online. Tal uses "the rule of the street", meaning that he checks if a café or a restaurant is busy to assess its success. As for Karen and Rachel, they both dedicate specific leisure time to purposely getting lost. Karen acknowledged to sometimes leave her place in advance to try and get someplace else in the city by wandering around. Rachel and her daughter take public transport to other neighbourhoods, and walk around to explore new places. In that sense, both suggest that leaving their smartphone behind and getting to know a place without the support of a GPS is a way to reclaim control. The satisfaction that follows is an empowering moment for them.

#### **Using Community Digital Urban Resources**

Although our research participants' use of ICTs seem to differ little from that of other Lisbon residents, or even visitors, part of their urban resourcefulness may be labelled migrant-specific. Namely, WhatsApp groups formed by Mozambican students or Brazilian women in Lisbon, Facebook groups of French (wannabe) residents, or of Asian migrants in Lisbon which Mohamed is a member of: the participation of Portugal-born locals in these groups is very rare. Other groups that seem more centred on interest/status such as the various Facebook groups of foreign parents administered by Andrea, or the Facebook donation group Buy Nothing Lisbon used by Flora have English as an official language. Even if some Portuguese members take part in the discussion, the majority of members are migrants.

Data collected by social media on the users themselves enables them to target advertisements more effectively. The so-called Facebook "suggestions", may, therefore, reinforce this migrant-specific trend, channelling migrants to their own national- or ethnic-related urban resources or activities. For instance, Flora shares: "Recently Instagram has been showing me advertisement about Brazilian restaurants that seem interesting too".

It makes no doubt that migrant users leave digital traces, which in turn are harvested by big tech corporations. The exploitation of "big data" by the scientific community itself to learn more about migration remains problematic (Taylor & Meissner, 2020) and is far beyond this pilot study's reach (Image 16.2).

In contrast to the claim that migrants have more digital interactions with relatives and friends in their regions of origin rather than in the place where they settled, we



**Image 16.2** Screenshot from Flora's smartphone. The restaurant's description is 'A Bahia em Lisboa', which means 'Bahia in Lisbon'. Bahia is a state in Brazil known for its African gastronomic heritage

find that even these migrant-specific resources are based in the city of settlement. Gordon and Silva (2011) make a compelling argument: "Net locality is, indeed, a global phenomenon, but it needs to be considered locally. How specific cultures appropriate technologies, adapt social practices, and produce cultural references, are going to influence the meanings of location." How does this unfold in practice?

One, participants join digital resources that are Lisbon-specific. The Facebook page *Lisboa para pessoas*, or that of the *Festival Feminista* where Flora interacts, the cultural activities Karen adds to her agenda – all eventually translate into physical encounters and embodied navigation. Facebook's Marketplace which was mentioned by a few participants to sell and buy second-hand goods is geolocated too and entails a physical meeting to exchange the purchased object.

Two, the digital resources developed by the participants are not always portable to other cities. This part of the interview with Flora was enlightening:

I developed Twitter in Spanish, so when I arrived here, people... that community that I had built on Twitter had nothing to do anymore! That is, nothing to do... If I would continue speaking Spanish, I would never talk to people here, right? With this tool. So I ended up leaving the tool aside [...].

Flora moved away from Twitter when her geographical/linguistic network did not match her new location. Tal gave a similar example with LinkedIn. By changing his location to Lisbon, he got much fewer job offers: the professional network he developed back in Israel did not match his new geographical location, hence the platform could not effectively advertise relevant jobs to him. This hints to a perceived limitation of the transnationalism paradigm, inasmuch as Flora's and Tal's connections elsewhere actually hindered opportunities in their new place of residence, rather than benefiting them.

#### 16.4 Discussion and Conclusions

In line with the transnationalism paradigm, this chapter has shown how migrants' use of ICTs to manage local life is place-binding but not *place-bound* (Ingold, 2011, 148). The ways migrant individuals construct their own urban resourcefulness does not only mean knowing by heart where to go or how to go, but increasingly implies the capacity to mobilise the digital realm in ways that respond to their daily practical needs. By resorting to ICTs, the circulation of urban knowledge is rescaled – and may include the support of neighbours and acquaintances on WhatsApp, but also transnational crowd-sourced information produced by other residents, other migrants, and city visitors alike, which is the case of Google reviews, TripAdvisor, or Facebook fora.

It is evident that this pilot research, both because of the number of participants, and the exceptional circumstances of a global pandemic only enables us to draw potential pathways for further research. Yet we trust that these preliminary comments are of great interest to those engaging with the intricate connections between migration, emplacement, and ICTs.

Firstly, our findings reinforce the argument that we cannot essentialise migrant persons in terms of their use of ICTs. ICTs often blur the established *versus* newcomer divide. The urban penetration of ICTs – the most visible of their powers being the so-called "algorithm" – is mentioned by participants concerned about data collection and privacy in general. Interestingly, while ICTs facilitate migrants' emplacement process, the search for autonomy involves asking people in the street rather than the GPS, or purposefully getting lost in the city. This has been perceived as an empowering and freeing moment by our research participants.

Secondly, as finely argued by Gordon and Silva (2011), this chapter provides further evidence that digital and urban resources are intertwined. Spatial apprenticeship (Buhr, 2018a) is increasingly supported by ICTs. Online navigation can actually shape the offline experience of using the city and vice-versa. But the fact that (migrant) urbanites provide feedback online produces new ways to imagine Lisbon, and in turn, can affect the ways the city is experienced by non-migrant locals and visitors. Previous works have highlighted the extent to which migrants are city-makers (Çaglar & Glick Schiller, 2018). Migrants' practices alter the structure of places (Desille, 2019). What we come to see is that their digital traces and the way they portray the places they use – by posting, commenting, sharing, and leaving reviews online – add up to an ICT-supported imaginary of the city fed by residents, migrants and tourists alike.

Thirdly, we found that certain digital urban resources may indeed be migrant-specific. There exist parallel WhatsApp and Facebook groups seldom used by Portuguese residents and in languages other than Portuguese. The "algorithm" can reinforce a rather migrant-specific use of space by directing users to places, events, or to groups used mainly by other people who have experienced migration in similar conditions or belonging to the same ethnic population.

The participants of this study are highly educated and highly mobile, and most of them have come of age with Internet at home and a smartphone. In their cases, rich social networks translated into more intense online activities and resources. In a context where access to education, the labour market, as well as cultural and social activities are increasingly mediated by ICTs, the lack of access to them — or low levels of digital literacy — could potentially represent a factor of double exclusion for more vulnerable and marginalised groups — including migrants.

Table 16.1 Research participants' details

		Country of	Cities lived in before Lisbon (except city	Settlement			Intensity of
Namea	Age	birth	of birth)	in Lisbon	Education	Current occupation	use of ICTs <sup>b</sup>
Armando	41	Mozambique	I	2019	Master degree	PhD student	Low to
							average
Andrea	35	Italy	Ferrera, Sevilla, Copenhagen	2017	Master degree (architecture)	Blogger and free- lance consultant	Very intense
Thomas	33	France	Lisbon, Strasbourg, Paris, Rio de Janeiro	2016	Business school	Account manager	Very intense
Rachel	40	USA	Worcester, Burlington, Winston-Salem, Medford, Paris, New York, Sevilla, Istan-	2018	Master degree (education)	PhD student	Average
			bul, Gzira, Santa Ana & El Rodeo, Cardiff				
Mohamed	36	Pakistan	Munich	2014	Vocational training	Shop owner	Low to
					(electricity)		average
Tal	36	Israel	Liège, Tel Aviv	2018	Master degree	Product manager	Intense
					(geography)		
Flora	43	Brazil	Orlando, Rome, Madrid	2019	Master degree (cul-	Free knowledge	Intense
					tural heritage)	strategy manager	
Karen	34	Brazil	Dublin, Paris	2015	Master degree	Operations	Average
					(Law)	executive	

<sup>&</sup>lt;sup>a</sup>Participants' names have been changed

<sup>b</sup>The intensity of ICT use was self-determined (by research participants) based on daily screen time and number of online/app-based services used

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